

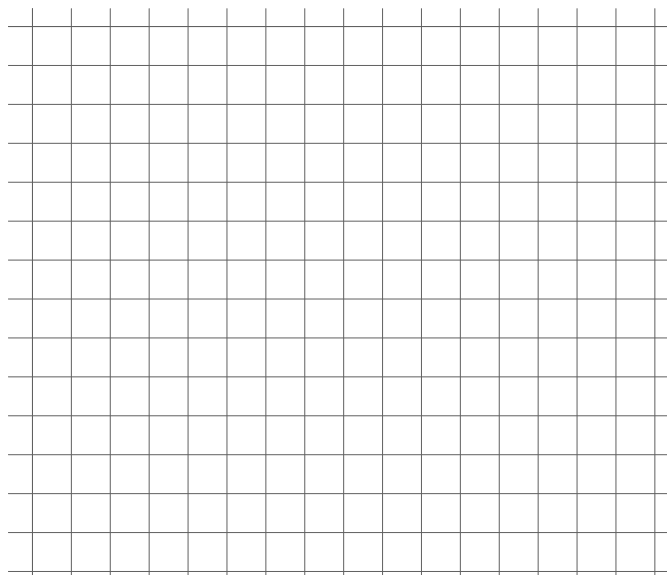
Name _____

Date _____

1. Identify the slope and y-intercept of each line. Then graph the line.

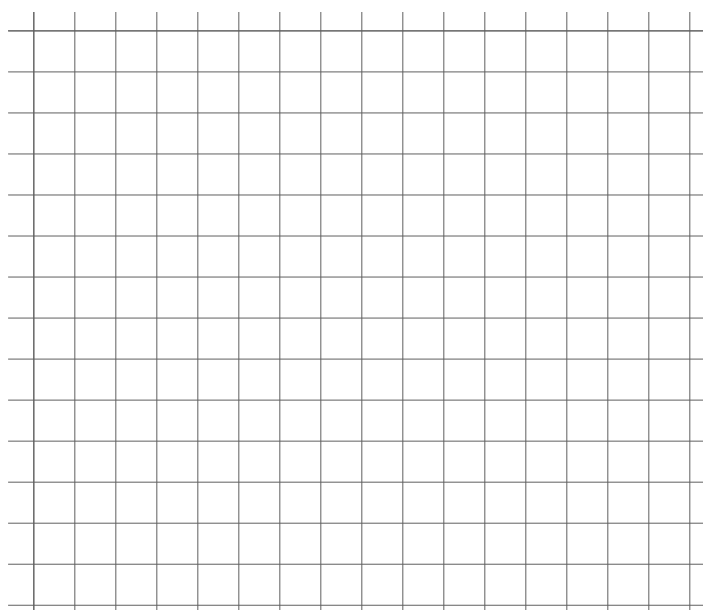
a. $y = -\frac{5}{3}x + 6$

slope = _____ y-in= _____



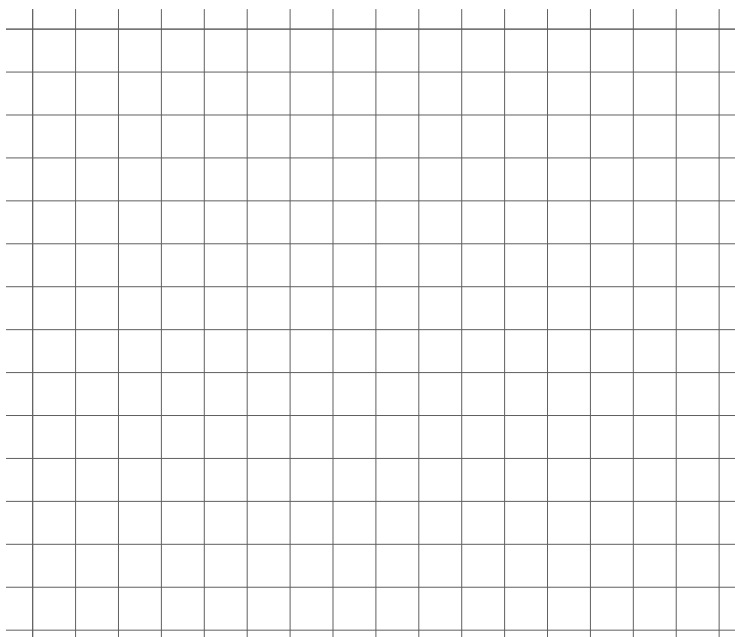
b. $y = -3$

slope = _____ y-in= _____




c. $x + 2y = -8$

slope = _____ y-in= _____



2. John and Kim wrote linear equations with the same rate of change and different y-intercepts. The table represents solutions of John's equation. Draw a graph that could represent Kim's equation.

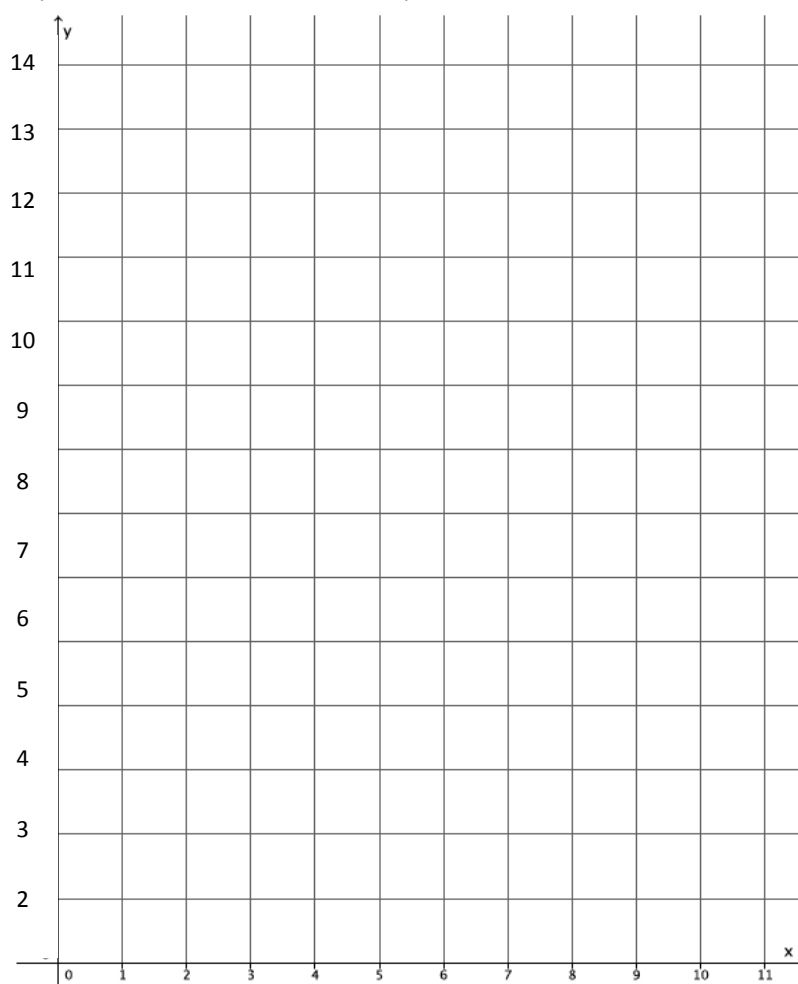
x	y
-1	-5
1	-1
3	3

A blank coordinate grid consisting of 15 vertical lines and 15 horizontal lines, forming a 14x14 grid of squares. The grid is intended for graphing a linear equation.

3. Parker paid \$4.50 for three pounds of gummy candy.
- a. Assuming each pound of gummy candy costs the same amount, complete the table of values representing the cost of gummy candy in pounds.

Gummy Candy in Pounds (x)	1	2	3	4	5	6	7	8	9
Cost (y)			\$4.50						

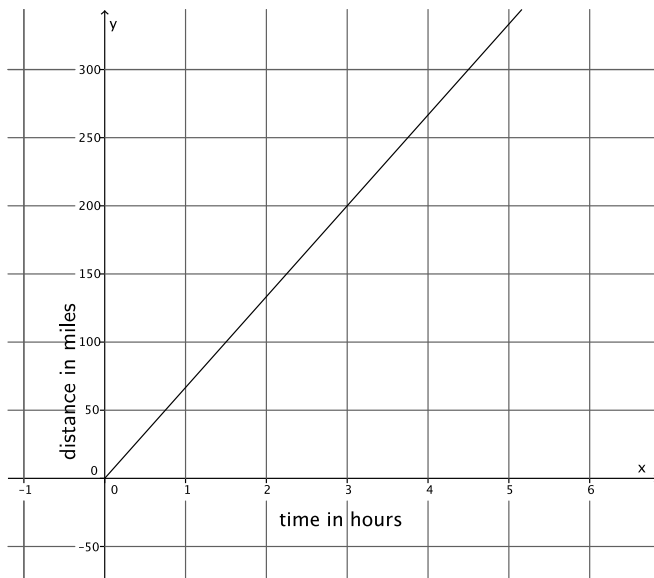
- b. Graph the data on the coordinate plane. Label



- c. On the same day, Parker's friend, Peggy, was charged \$5 for $1\frac{1}{2}$ lb. of gummy candy. Explain why this must be a mistake.

- 4 a. Train A can travel a distance of 600 miles in 8 hours. Assuming the train travels at a constant rate, write the linear equation that represents the situation.

- b. The graph represents the constant rate of travel for Train B. Which train is faster? Explain/Show work.



5. Determine the equation of the line containing the points (0, -1) and (2, 3).

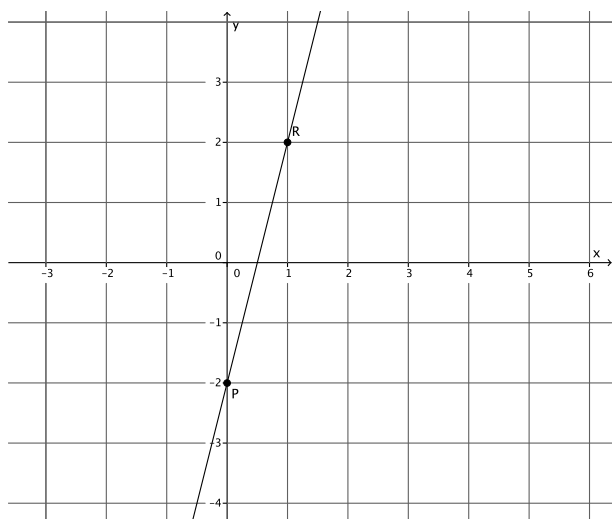
6. Matt rides his bike at a rate of 12 miles per hour. Below is a table that represents the number of hours and miles Justin rides his bike. Both bikers ride at a constant rate.

- a. Identify Justin's rate of change.

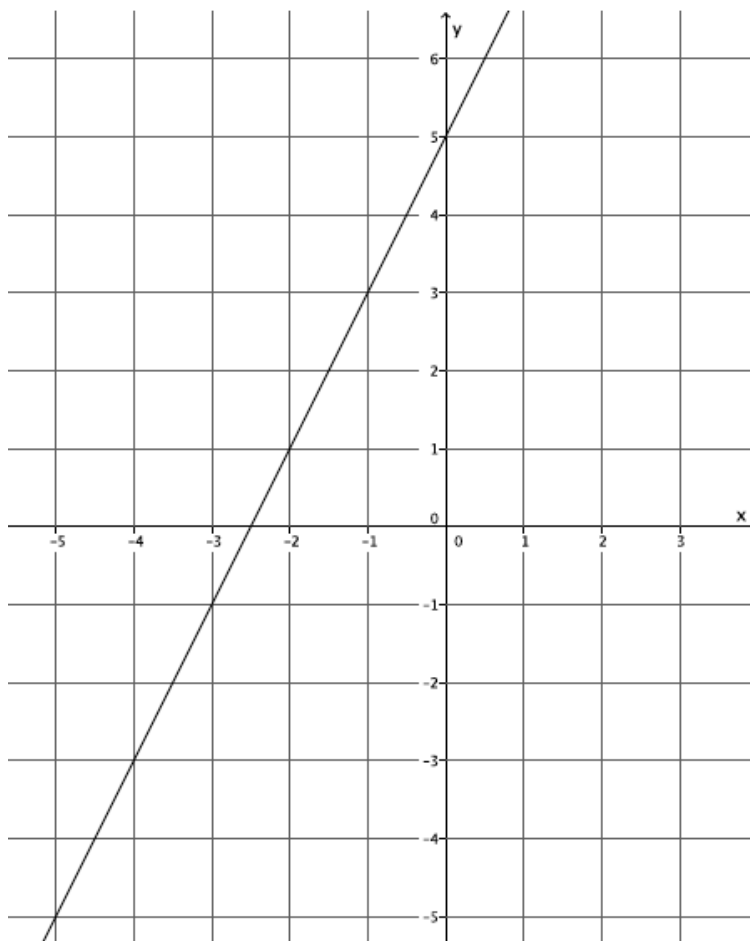
Time in hours (x)	Distance in miles (y)
1.5	17.25
2	23
3.5	40.25
4	46

- b. Which biker rides at a greater speed? Explain your reasoning.
- c. Write an equation for a third biker, Lauren, who rides twice as fast as Justin. Use y to represent the number of miles Lauren travels in x hours.

7. Write the equation of the line below:



8. Consider this graph of a line.



Which equation(s) has a rate of change **greater than** the rate of change for the line shown?

- ☐ A. $y = 3x - 1$
- ☐ B. $y = \frac{x}{2} + 4$
- ☐ C. $y = 2x + 2$
- ☐ D. $y = \frac{x}{3} - 3$

